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Subject: Re: [ckrm-tech] [patch00/05]: Containers(V2)- Introduction

Posted by [Paul Jackson](#) on Wed, 20 Sep 2006 23:37:22 GMT

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Paul M., responding to Alan:

> > I'm also not clear how you handle shared pages correctly under the fake  
> > node system, can you perhaps explain that further how this works for say  
> > a single apache/php/glibc shared page set across 5000 containers each a  
> > web site.

>

> If you can associate files with containers, you can have a "shared  
> libraries" container that the libraries/binaries for apache/php/glibc  
> are associated with - all pages from those files are then accounted to  
> the shared container.

The way you "associate" a file with a cpuset is to have some task in that cpuset open that file and touch its pages -- where that task does so before any other would be user of the file. Then so long as those pages have any users or aren't reclaimed, they stay in memory or swap, free for anyone to reference (free so far as cpusets cares, which is not in the slightest.)

Such pre-touching of files is common occurrence on the HPC (High Perf Comp.) apps that run on the big honkin NUMA iron where cpusets were born. I'm guessing that someone hosting 5000 web servers would rather not deal with that particular hassle.

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I won't rest till it's the best ...  
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